List of projects for the COMNAP Fellowship Scheme 2017–2018

1. Air Operations
   a. Use of Unmanned Aerial Systems in support of Antarctic science
   b. Use of Unmanned Aerial Systems in support of Antarctic operations
   c. Use of Unmanned Aerial Systems in support of Antarctic logistics
   d. Use of Unmanned Aerial Systems in support of Antarctic science and wildlife benefits and risks

2. Energy & Technology
   a. Stream-lining remote field camp set-up
   b. Reduction of fossil fuel use at remote field camps
   c. Reduction of fossil fuel use at winter-over stations
   d. Reduction of fossil fuel use at seasonal stations
   e. Cost/benefit analysis of fossil fuel use in Antarctic logistics (ships, aircraft, traverse etc)
   f. COMNAP ARC results- focus on providing a gap in one of the technologies required

3. Engineering
   a. Station design
   b. Ship design
   c. Science support equipment design
   d. Medical-related design

4. Environment
   a. Waste treatments and waste management at Antarctic facilities
   b. Mitigation strategies for the introduction of non-native species in the Antarctic

5. Medical
   a. Medical "wastes" into Antarctic waters
   b. Best practice for returning medical supplies and medicines from Antarctica
   c. Ensuring quality of drinking water on stations and in the field, and at those stations which have them, the monitoring of the quality and/or bacteria content of spa waters and the need for associated bacteria monitoring programmes
   d. Transportation of patients onto and between various aircraft (also linked with engineering/technology)
   e. Inability to hold certain drugs, such as narcotics, at stations due to legal definitions and domestic legislation restrictions

6. Safety
   a. Clothing fit for purpose
   b. Cravasse detection
   c. Avoiding carbon monoxide poisoning
   d. Reducing risk related to fire emergencies
   e. Snow mobile/ski-doo safe use
   f. Diving safety

7. Science
   a. Increasing understanding in relation to any of the 80 SCAR Horizon Scan critical science questions

8. Social Science
    b. Human dimension of winter-over situations

9. Humanities

10. Law
    c. COMNAP's role within the ATCM
    d. COMNAP's contribution to discussions in ATCM Working Group 2

11. Shipping/Ship Operations
    e. Efficient design strategies for ice-breaking vessels
    f. The Implementation of the IMO Polar Code

12. Education

13. Outreach/Media/Communications

14. Search and Rescue

15. Data Management